

INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU2003/001691

A. CLASSIFICATION OF SUBJECT MATTER

Int. Cl. ⁷: H01R 25/14, H01B 5/02,

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Please see electronic data base consulted

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

DWPI: H01R 25/-, H02G 5/-, H01B 5/-, rail, track, bus, strip, elongate conductor, longitudinal conductor, rib, web, space, separate, gap, resilient, bias, spring, deform, elastic

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 1996012327 A1 (SINCLAIR J A) 25 April 1996 entire document	1,3-11,13-18
X	WO 1993003517 A1 (MASS INTERNATIONAL PTY LTD) 18 February 1993 entire document	1-6,8-20,89, 90,91
P,X	EP 1283578 A1 (FCI) 12 February 2003 entire document	1,3-5,8-11, 14-18,20, 89-91,93,94

☒ Further documents are listed in the continuation of Box C

☒ See patent family annex

* Special categories of cited documents:	
"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"E" earlier application or patent but published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search
31 March 2004

Date of mailing of the international search report

- 8 APR 2004

Name and mailing address of the ISA/AU

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 2001009988 A1 (UNIVERSAL POWER TRACK PTY LTD) 8 February 2001 entire document	
A	EP 0544031 B1 (FAHRLEITUNGSBAU GMBH) 2 June 1993 entire document	
A	GB 2132825 A (ELECTRAK INTERNATIONAL LIMITED) 11 July 1984 entire document	
A	US 4493516 A (ATTEMA G) 15 January 1985 entire document	

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Box I Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos :

because they relate to subject matter not required to be searched by this Authority, namely:

2. ☐ Claims Nos :

because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. ☐ Claims Nos :

because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a)

Box II Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

Please see attached extra sheet.

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims

2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.

3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.: 1-20, 89-94.

Remark on Protest

☐ The additional search fees were accompanied by the applicant's protest.

☐ No protest accompanied the payment of additional search fees.

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Supplemental Box

(To be used when the space in any of Boxes I to VIII is not sufficient)

Continuation of Box No II:

1. Claims 1-20 and 89 -94 are directed to an elongate electrical conductor including a longitudinally extending elongate body defining a first contact surface, a plurality of longitudinally spaced apart ribs that extend from the body to respective free ends that are spaced apart from the first contact surface, each rib including a respective second contact surface that is opposed to the first contact surface, upon progression of a contact between the body and one or more ribs the first and second surfaces are resiliently biased into engagement with the contact. It is considered that the plurality of spaced apart ribs that extend from the elongate first contact surface to the respective second contact surface, resiliently biasing a contact between the contact surfaces comprises a first "special technical feature".
2. Claims 21-27 are directed to an elongate electrical conductor including a first longitudinally extending elongate body having a planar contact surface and a second longitudinally extending elongate body mounted to the first body defining an arcuate contact surface that is opposed to the planar contact surface, upon progression of a contact between the first and the second bodies, the planar and arcuate surfaces are resiliently biased into engagement with the contact. It is considered that the planar contact surface of the first body and the arcuate contact surface of the second body resiliently biasing a contact between the contact surfaces comprises a second "special technical feature".
3. Claims 28-68 are directed to a conduit housing having mounting formations disposed in the housing to retain an elongate electrical conductor and an opening for receiving a contact and allowing the contact to be brought into engagement with the conductor. It is considered that the conduit housing having mounting formations disposed in the housing to retain an elongate electrical conductor and an opening for receiving a contact and allowing the contact to be brought into engagement with the conductor comprises a third "special technical feature".
4. Claims 69-88 are directed to a contact assembly including a housing, plurality of contacts mounted in the housing which are movable into engagement with respective conductors within a conduit in a predetermined sequence. It is considered that the contact assembly including a housing, plurality of contacts mounted in the housing which are movable into engagement with respective conductors within a conduit in a predetermined sequence comprises a fourth "special technical feature".
5. Claims 95-97 are directed to a contact assembly including a housing, plurality of contacts mounted in the housing which are moveable into engagement with respective conductors within a conduit, a guide mounted to the housing provides external indication regarding engagement. It is considered that the contact assembly including a housing, plurality of contacts mounted in the housing which are moveable into engagement with respective conductors within a conduit, and a guide mounted to the housing providing external indication regarding engagement comprises a fifth "special technical feature".

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This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report				Patent Family Member			
WO	9612327	AU	36449/95	BR	9509335	CA	2202536
		EP	0787373	NZ	293885	US	2001040040
WO	9303517	AU	24215/92	BR	9206402	CA	2114617
		EP	0597980	FI	940518	HU	67892
		SG	43100	US	5618192		
EP	1283578	CN	1407669	FR	2828591		
WO	0109988	AU	59560/00	BG	106353	CZ	20020350
		FI	20020147	HU	0202185	NO	20020418
		SK	1902002				
EP	0544031						
GB	2132825						
US	4493516	BE	884045	CH	657238	DE	3024244
		FR	2460556	GB	2053591	NL	7907278
		ZA	8000547				

"Due to data integration issues this family listing may not include 10 digit Australian applications filed since May 2001."